STATUS OF COMPUTER PLANS AND APPLICATIONS IN THE DEPARTMENTS OF MEDICINE AND SURGERY AND VETERANS' BENEFITS

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON VETERANS' AFFAIRS HOUSE OF REPRESENTATIVES

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STATUS OF COMPUTER PLANS AND APPLICATIONS IN THE DEPARTMENTS OF MEDICINE AND SURGERY AND VETERANS' BENEFITS

WEDNESDAY, MARCH 24, 1982

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 8:30 a.m., in room 334, Cannon House Office Building, Hon. G. V. Montgomery (chairman of the subcommittee) presiding.

Present: Representatives Montgomery, Hall, Hillis, Stump, Solomon, Won Pat, and Sawyer.

OPENING STATEMENT OF CHAIRMAN MONTGOMERY

Mr. MONTGOMERY. Good morning. The subcommittee will come to order. We have been on the road with this subcommittee in Memphis, Tenn., along the banks of the mighty Mississippi River Monday. We appreciate the attendance this morning to hear from the Deputy Administrator of the Veterans' Administration, Chuck Hagel, about the Administration's computer plans and the application of those plans to the Department of Medicine and Surgery.

Computer planning and acquisition within the VA is becoming increasingly important in the day-to-day operations of the agency, and this subcommittee's previous hearings on the TARGET computer system emphasize the necessity of continuing our oversight on VA computer plans.

One of Administrator Robert Nimmo's first actions after taking office was to set in motion an analysis and re-examination of VA's overall ADP plans and programs. He also issued a hold order on all ADP activities. The Deputy Administrator, Mr. Charles T. Hagel, was designated as the VA's ADP executive and given overall charge and direction of the agencywide ADP review and reassessment.

As a result of the reassessment and recommendations made to the Administrator, an executive order was issued on February 18 establishing a new policy for use and control of computers and ADP technology by the VA Department of Medicine and Surgery. In effect, the Administrator's order directs decentralization of computers and ADP policy in the Department of Medicine and Surgery, and mandates that computer applications be developed separately from the agenda previously followed by the Veterans' Administration.

The Administrator's executive order states that the Chief Medical Director will have the overall responsibility for the implementation of computer decentralization in DM&S as recommended by the Deputy Administrator, the Chief Medical Director was directed to establish a project management task force on a temporary basis as the central office organizational vehicle to provide policy and guidance for the implementation of computer decentralization.

We expect the Deputy Administrator, who is the principal witness for the VA today, to provide us with an indepth assessment of the executive order; advise us how any future computer planning will be affected, and the impact upon the Office of Data Management and Telecommunications and its personnel. We also expect to learn of the plans of the Deputy Administrator for computer systems within the Department of Veterans' Benefits, since the executive order does not appear to address such plans.

As stated previously, Mr. Charles T. Hagel, Deputy Administrator of the Veterans' Administration, will address the subcommittee in his capacity as the agency's ADP executive. Mr. Hagel, we welcome you and your associates. Before you begin, would you please identify those accompanying you?

STATEMENTS OF A PANEL CONSISTING OF CHARLES T. HAGEL, DEPUTY ADMINISTRATOR, VETERANS' ADMINISTRATION, ACCOMPANIED BY JACK SHARKEY, ASSISTANT DEPUTY ADMINISTRATOR, DR. KENNETH DICKIE, PROJECT MANAGEMENT TASK FORCE, JOHN MATTINGLY, SPECIAL ASSISTANT FOR ADP ACTIVITIES, DR. WILLIAM WARD, ADMINISTRATOR'S ADP TASK FORCE, AND DANNY BALL, DIRECTOR, DATA PROCESSING CENTER, HINES, ILL.

Mr. HAGEL. Thank you, Mr. Chairman, and good morning.

First, I would like to introduce those with me from the Veterans' Administration. On my left is Mr. Jack Sharkey, Assistant Deputy Administrator for Office of Data Management and Telecommunications. On my far right, Dr. Ken Dickie, the new chairman of the Department of Medicine and Surgery, Program Management Task Force. On my immediate right is Dr. Bill Ward who has been the chairman of the Administrator's ADP Review Task Force. Dr. Ward is a consultant, computer management specialist, and also is head of the Virginia Polytechnical Institutes for Graduate Business School.

Behind me, Mr. Chairman, on the far left of me, to your far right, is Mr. John Mattingly. Mr. Mattingly is Special Assistant for ADP Activities for the Department of Veterans' Benefits and next to Mr. Mattingly is Mr. Danny Ball, who is Director of our ODM&T Processing Center at Hines, Ill.

If it agreeable with you, Mr. Chairman, and the committee, I would like to dispense with reading my 8-page statement, as you said it would be put in the record. I would like to make some statements and observations about why we have taken some of the action we have taken and where we may be going, why and how, and then I would like to ask for questions and get to specifics of the statement that I'm sure you're staff and subcommittee has had some time to review.

As you know, Mr. Chairman, this agency is the most human of all Government agencies. Every decision we make in the Veterans' Administration touches the lives of millions of Americans. These are special Americans. These are the Americans who made the downpayment for the future of this country.

So, we have not taken lightly the decisions that we have made and we look forward to giving, hopefully, new vision in the future to computer processes which will help better serve those veterans and especially help those dedicated VA employees who have given their lives to serve veterans.

We think in the immediate, that our highest priority is the Department of Medicine and Surgery and, therefore, that is why we made this decision, a decision that was culminated by an executive order by the Administrator on February 18 to decentralize our computer process within DM&S.

The specifics of that, I believe, are laid out fairly specifically in the statement and we would be very pleased, of course, to take more specific questions.

We are involved now in another phase of our automated data processing within the VA and that is looking out over the Office of Data Management and Telecommunications and how that office, Jack Sharkey's office, can better serve the needs of those veterans. The Department of Veterans' Benefits will be very much a part of that review.

I think with that, Mr. Chairman, I would conclude by saying that when Bob Nimmo and I accepted the responsibility of managing the VA, it was not to preside over the status quo but to try and leave this agency better than we found it.

That means that we've brought in around us, we think, some of the finest talent, some of the most dedicated talent, among VA employees, and we've reached outside for some of that help. We feel fairly secure that we're on the right track, knowing and understanding that we don't have all the answers but we intend to get them.

With that, Mr. Chairman, thank you this morning for the opportunity to be here, I couldn't help but notice your new portrait and if our ADP process is as successful as the VA employee who painted your portrait, we'll do very well.

I might say that we're all inspired by that portrait, Mr. Chairman, and we expect a successful hearing this morning.

Thank you.

[The prepared statement of Mr. Hagel appears on p. 21.]

Mr. MONTGOMERY. You handled me well this morning, Mr. Director. You made a short statement and pointed out the portrait I was hoping someone would mention.

Mr. HAGEL. That's the first question that I asked, Mr. Chairman, when I came in.

Mr. MONTGOMERY. Mr. Hillis.

Mr. HILLIS. I'd certainly like to welcome you here this morning, Mr. Hagel, and I'll get through your statement in full. I'm most interested in the program that you're going to outline for us and I'm certain that it's going to be a major improvement in the services that are available to care for the veterans.

I have a little familiarity with the so-called TARGET system. I would like to know if this is an extension of that or is it going to be separate from that or will you all be in one general computerized network? Just how is that going to work?

Mr. HAGEL. Mr. Hillis, as I mentioned, the Department of Medicine and Surgery's ADP plan is confined only to those 172 medical centers that we have across the country. It will not affect the decisions of TARGET.

Review of TARGET, the upgrading of TARGET, and the upgrading and review of our five data processing centers across the country has begun with the cooperation of all of the elements within the VA.

Mr. HILLIS. I've been a member of this subcommittee for a couple of terms now, and sat in on some of the hearings with the origination of TARGET, and know that there were some serious problems, initially.

Perhaps, they should have been expected. I'm not being critical of anyone about it. But the subcommittee went to Memphis on Monday and met with various VA officials and I brought up the subject of TARGET there. And it's my understanding it's working quite well now, that the bugs are out, and that it's performing as it was proposed to do. And I wondered if you'd be able to institute this system, based upon the experience that you had in the initiation of that system so that this will come onstream maybe quicker and with fewer problems than we had with the TARGET system.

Mr. HAGEL. Well, Mr. Hillis, you're exactly right as far as the quality and the consistency of the TARGET system. We have gotten to the point where it's not perfect but we think it is working more than satisfactorily.

With that kind of proven track record and that kind of credibility, we are calling upon the expertise of those who understand that system and have helped us implement it.

Jack Sharkey's people who have that responsibility and Mr. John Mattingly, who is with me, understand that and there is no point in retracing ground that we've already been over before so we intend very directly to employ that kind of professionalism in helping us get this DM&S plan onboard.

Mr. HILLIS. One more general question and I'll let you go. Of course, my district is in central Indiana and I couldn't help but notice that Indianapolis has been designated as an expansion hospital under Mr. Nimmo's order.

I wonder if you could give me some idea where and at what point in time expansion hospitals like Indianapolis would become part of the new system and in Indiana we have two other small hospitals, Marion and Fort Wayne.

I wondered where they will fit into this system. Will they eventually come into it, where you have smaller or what might be called satellite hospitals?

Mr. HAGEL. Yes, because of some expertise and some hardware and software already in existence at the hospitals that we've listed in the lead and primary categories, we can move very quickly in getting those 18 hospitals online by the end of this summer.

The 34 hospitals that Indianapolis is one of, in the expansion category, we hope to have all of those up and moving with laboratory scheduling and pharmacy systems within the next 12 months.

After those approximately 52 hospitals are online, then that will move us into another year and the priority will be to take the next 25 hospitals, as I mentioned in my statement that provide 80 percent of the acute care in the VA.

After those then within the next 2 years, try and cover all of the 172 hospitals in the system.

So, your question regarding the two other hospitals in Indiana, would fall within the next 2 years.

Mr. MONTGOMERY. Mr. Stump of Arizona.

Mr. STUMP. Thank you, Mr. Chairman.

Dr. Dickie, as chairman of the newly formed project management task force, what do you see or foresee for the medical centers as a result of this decentralization?

Dr. DICKIE. We have already had a field test on what we're attempting to do at the present time. We've done it in several hospitals about the country.

We've determined how it can occur at the facility level and at the same time have a unified base of how we're going. We will develop the centers as has already been mentioned by Mr. Hagel.

We will, in a sense, buddy those centers up with other centers out there to progress throughout the field. And getting to the 172 hospitals will be, to a large extent, a field directed operation.

Mr. HILLIS. Will your task force have to clear all instructions to the Veterans' Administration Medical Center directors through Dr. Custis? Pardon me, or would you have complete authority to operate as you please?

Dr. DICKIE. I report to Dr. Custis.

Mr. STUMP. Thank you, Mr. Chairman.

Mr. MONTGOMERY. Let the record show that Mr. Solomon of New York was here and he's going to try to get back. He had to go to another committee hearing. The Chair would like to recognize the gentleman from Guam, Mr. Won Pat.

Mr. WON PAT. Thank you, Mr. Chairman.

First, I want to join my colleagues in welcoming you, Mr. Hagel, and your colleagues, to this committee.

I note, of course, from your introductory statement that your organization has applied to this committee to upgrade your ADP operation and you have, of course, your statement pointing out that you have the best people now engaged and you have introduced what they call the computer system and that is working now to the efficiency of the operation. It is very encouraging to learn about that.

I am, of course, concerned about the services on Guam. As you know, Mr. Hagel, we have a new office on Guam. Does that office have any connection or in other words, any ties with Honolulu so cases could be expedited?

Mr. HAGEL. At the present time, Mr. Won Pat, it does not. But the possibility, the potential of networking somewhere down the line is something that we are reviewing and studying so at some time there may well be a connection.

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Mr. WON PAT. Presently, we have in the naval hospital only about three beds available—I don't know whether that is correct or not—for veterans. Can you tell us whether that is the number that is available or not? In other words, could it be extended or, rather, increased?

Mr. HAGEL. Can we extend what we are doing with our computers to the naval hospital in Guam?

Mr. WON PAT. Yes.

Mr. HAGEL. I would think that probably is impossible to do within our system. They certainly could use the expertise that we have within our system and we have traded information with them because they have a fairly sophisticated network within their hospitals. But to directly apply that to the naval hospital in Guam, I think that would be impossible.

Mr. WON PAT. I know the Navy is reluctant to really provide services to the veterans. They prefer active service, taking turns. We are concerned when veterans get sick and whether it means they have to go to Honolulu which is quite a distance.

There is one question I would like to ask: When servicemen have been sent to Honolulu for treatment, that is paid by the agency. When the patient dies, it is left, of course, to the family to pay for the return home of the patient that died. I don't know whether that is the way it is done.

Mr. HAGEL. Mr. Won Pat, I am not at all certain that I can answer that question. If we could provide that for the record? I would truly be out of my depth by even attempting an answer to that. We will provide it for the record, though.

[Subsequently, the Veterans' Administration furnished the following information:]

Section 903(a)(2), title 38, U.S.C., provides that when a veteran dies in a VA facility, the Administrator "shall, when such death occurs in a State, transport the body to the place of burial in the same or any other State."

The definition of VA facilities includes government and private facilities for which the Administrator contracts, and the term "State" includes territories of the United States. Therefore, the remains of veterans who expire while hospitalized as VA beneficiaries in Hawaii may be transported at government expense to the place of burial in Guam or another "State."

Mr. WON PAT. Thank you very much. The matter was, of course, brought to my attention by the people involved.

Thank you, Mr. Hagel. Thank you, Mr. Chairman.

Mr. MONTGOMERY. Thank you, Mr. Won Pat.

Mr. Hagel, what sort of cost benefits or cost savings do you foresee as a result of this decentralization?

Mr. HAGEL. The first 18 hospitals that I've referred to in the lead and primary category will not cost the VA any hardware, software or manpower. Personnel slots.

We have that already out in the field and the first 18 hospitals will be brought onboard without any additional cost.

After that, of course, there will be additional costs for machinery and people. We don't have any solid understanding, right now, Mr. Chairman of what kind of a cost-benefit ratio we will derive from this. We now have the Office of Program Planning and Evaluation involved along with ODM&T and both task forces onboard, are studying that cost-benefit analysis and will report to us by Septem-

ber of this year what we think we can save in terms of resources by this decision.

Mr. MONTGOMERY. I guess this next question is along the same line. Have you estimated how much it will cost for the Chief Medical Director to reestimate the DM&S management information requirements and for the VA controller to reestimate the reporting and strategical requirements in the same manner as DM&S.

Mr. HAGEL. Reviews are both ongoing concerning those two areas, Mr. Chairman. And we still don't have any figures back from that review.

If Dr. Dickie would want to amplify on that or Dr. Ward. I'd be happy to have them add their comments.

Dr. WARD. Mr. Chairman, when we originally looked at the management reporting requirements of DM&S. We know, for example, that the AMIS report consists of 1,236 separate, small reports and it comes out in, more or less you buy it by the pound rather than have the opportunity to get it in summary statistical data.

It's awfully hard for the Chief Medical Director or others involved in decisionmaking to go through that large, voluminous set of data or reports.

Therefore, the Administrator in the order would like very much for Dr. Custis to streamline a set of management reporting requirements so that decisionmaking in DM&S could be addressed in a much more effective manner. He has put together, the Chief Medical Director, that is, a group to overhaul those management reporting requirements to greatly enhance effectiveness and decisionmaking in terms of the way DM&S goes about its business.

In addition, both the Administrator and the Deputy have asked that some summary data of short summary type management information report be constructed so that they would have access to reasonably reliable quick information in terms of decisionmaking.

So, the problem is that that requirement is to get away from the tremendously large and voluminous collection of data which many times is not relevant to decisions that affect medical operation. A lot of that data is tied for research or other purposes, to the biomedical statistical basis, et cetera. And it's a lot of computer time and a lot of cost involved in continuously gathering those reports and spinning those wheels in those particular kinds of things for spinning those disks.

And one of those requirements is to get through and see which of that can be eliminated, which of that can be shortened and how that can better be summarized to aid decisionmaking in DM&S.

So, let me ask Dr. Dickie to offer any additional comments he might have.

Dr. DICKIE. One of the reasons that we got into this from the field trial, was that as we moved in with the minicomputers and very few people, we found that we could free up a number of the people in the hospital to do other tasks.

Within the facilities at the present time, we cannot do all the things that we, as clinicians, think have to be done so we have to free people up and put them on other tasks.

By using a very small computer and a small staff, we were able to free up several people for other tasks during the 2-year period

that we had the field trial. We're looking forward to cost-benefit studies. We think they'll look very good.

And, in fact, we're asking for the most part to use funds that we've already committed to other things to use for this purpose with the thought that we will be able to defray the cost of a lot of this sort of operating expenses.

Now, initially, we will need some increased funding.

Mr. MONTGOMERY. Before calling on counsel, I would like to get off on a completely different subject. Mr. Hagel, this might catch you a little off your guard, I hope not though. The NBC program that was shown last weekend is causing comment on the Hill about the abuses that were allegedly taking place in the veterans' hospital in Missouri.

Would you care to comment on what action the Administrator is taking at this time?

Mr. HAGEL. Mr. Chairman, first of all, obviously no one can justify or excuse the actions that took place and the misconduct that obviously was present in that hospital.

The Inspector General and the Administrator and I met yesterday about that "NBC Magazine" report. We have another meeting this afternoon at 4 p.m. We've been talking with our medical people, Dr. Custis will be involved in that meeting, trying to find out more definitively what action was taken and where DM&S went with that information after the Inspector General went into the hospital and developed that report.

I might say, in reviewing that report which I did do yesterday morning, the full report of the Inspector General, it was not laid out in a very organized way in the presentation we saw on NBC Friday night.

Again, I don't want to allow anyone to misinterpret that statement by saying or thinking that I'm excusing or making an excuse for what went on. But, there was much more to it than what was shown in that 20 minute segment on NBC.

So, the short answer to your question is, Mr. Chairman, yes we are looking at it. We expect to report back to the Congress, to your committee and to Senator Simpson's committee on what action was taken and what we intend to do.

Mr. MONTGOMERY. Of course, that's the exception but it does set us back when we're trying to do things for the veterans and all of a sudden a situation like this develops.

We have to push for the best we can for the veterans and their dependents. And show that we are trying when these things do happen—to correct problems when they arise.

Mr. Hall, do you have any comments on this hearing this morning?

Mr. HALL. No.

Mr. MONTGOMERY. Counsel on committee, Mr. McDonell.

Mr. MCDONELL. Dr. Ward, I wonder if you could provide us with details as to how you would connect on a national basis, your decentralized computers at the 172 hospitals in order to transmit the reporting data that you were just discussing?

Dr. WARD. Well, sir, if you look at that as a technical problem, you'd need also to look at it as a managerial problem.

Networking and the use of telecommunications costs a lot of money. We took all 172 hospitals and installed in them networking and telecommunications devices so that you would provide instant access to gather data and summarize reports on a daily basis.

You have to ask for a lot of money. In addition, you'd probably be subject to information overload. The fact that no one could digest—to use for decisionmaking or management—that much information.

So, therefore, a number of possibilities summarizing that management reporting information exists all the way from very expensive, very luxurious, deluxe fashion of instantaneous access and networking down to something about as simple as this.

Which is simply to take your minicomputer in each hospital, run a small program across it. Once or twice a month, run a dump of everything in that mini and just tear that off and mail it in. That's the most cost-effective way to go. And it depends on what Dr. Custis needs. And I don't presume to say what he needs.

I think that is his decision and that's the Administrator's decision with him in terms of how he, Dr. Custis, wants to manage that system.

But I think how he sees this management reporting requirement and his information management requirement will really drive how that data is aggregated or summarized and then displayed in some reasonably effective kind of fashion that will aid his decisionmaking.

There are a great number of options in the way that can be done. And I am not specifying what those options are. Dr. Custis is, and he is charged with that management reporting requirement and I'm sure he will, sometime in the next 30 to 60 days. He has a group working on that now to overhaul his reporting requirement and come up with a more effective kind of format in terms of being able to get at the sort of data he wants and make decisions concerning DM&S.

Mr. McDONELL. So, as we understand then, you have at this time not made a definitive plan as to how you're going to net all of the hospitals; is that correct?

Dr. WARD. No firm decision on networking or centralizing the minicomputers has been made. Minicomputers, the use of the systems, modular subsystems in the minicomputer such as pharmacy, laboratory, scheduling systems, and that sort of things are really localized in the minicomputer at the hospital.

The only basic centralized feature of decentralized, minicomputer- or microcomputer-type system would be the management reporting requirement and the aggregation and summarization of that data for decisionmaking.

Decentralization attempts to make the computer available as an effective tool for hospital directors and hospital managers to run the pharmacy in terms of providing effectiveness at the pharmacy. Cut waiting time for veterans, which it has done to provide a very accurate scheduling of beds in surgery and things like that as opposed to a manual system.

The same sort of thing in laboratory testing, to give those people in the field basically the sort of tool in their tool kit that they need to help with their operations and one of the cost-benefit effects of

computers, per se is to enhance the ability to deliver primary health care in those areas without the use of a lot of manual, administrative sort of subsystems that take away from the effort. We find that medical professionals really need to treat the patients.

So, the initial effort is really well received and well directed in that regard. And, then it just simply becomes in terms of the cost-benefit a choice between various kinds and types of subsystems that you want to install in terms of the cost-benefits and how much in the way of resources you're willing to put into those systems.

It's possible to build a lot of beautiful, lovely, luxurious, and deluxe systems but that doesn't necessarily add more effectiveness to the type of health care. We are trying to start with what we could consider the basic level sort of systems approach and get on to the key areas, such as scheduling, pharmacy and lab to have the greatest impact and provide the greatest amount of effectiveness. And the other part of minicomputer is to leave half or more of its capacity available for the local health care professionals, physicians, the hospital director, et cetera to have some choice and some flexibility over the use of the mini as a tool.

If you compare the Veterans' Administration medical centers for example, Washington, D.C. and others, you see some great variety in those that do have computer capability now from computerizing parking lots, consumer registries, and a lot of other areas.

There is a considerable difference, for example, between the VA hospital that was involved with the tertiary level of care with a lot of research projects and one of the smaller VA hospitals.

Therefore, that flexibility needs to be there for the physicians and the health care professionals and the director to address particular problems of that hospital. And that is one of the great advantages in terms of decentralization, is to give them that kind of flexibility.

Mr. MONTGOMERY. Dr. Ward, I know at Bethesda Naval Hospital they, in effect, have the food computerized in the hospital. Do they have any plans for computerizing food service in the veterans hospital?

Dr. WARD. Some hospitals, veterans hospitals, have dietectics on computerized systems. Now, as a localized system, they do that out here at the Washington, D.C. hospital in terms of dietectics and food scheduling. In using a minicomputer at a hospital, that certainly is a capability.

If the individual director and staff of that hospital in having a minicomputer wanted to write the dietetics program, run food services that could certainly be done.

Mr. MONTGOMERY. I'm not recommending it. I just know the first time I'd seen it or heard about it was at Bethesda Naval Hospital.

Dr. WARD. Washington, D.C. is the VA hospital where almost all of the meals and menu preparation is on a computerized system. Rather than on a manual.

Mr. MONTGOMERY. How does it work compared to hospitals that——

Dr. WARD. We spent some time with the chief of dietetics at Washington, D.C. hospital and I would say that she gave the computerized system what we would call rave reviews as opposed to a manual system.

I think it's effectiveness in terms of providing all the special dietetic requirements for patients, et cetera is very effective. It certainly saves a lot of time in manual effort in terms of scheduling of meals and preparation of the meals.

Mr. McDONELL. Mr. Hagel, in your instructions or guidelines to your hospital directors, are you going to standardize the procurement of hardware such as computers, or can we expect to see maybe 172 different types of computers out there?

Mr. HAGEL. No, there will be standardization and the Office of Procurement and Supply, along with ODM&T will play very major roles in that.

Obviously, the volume buying concept dollarwise is the smartest way and, of course, we've got to maintain standardization within the system so that we've got compatible, consistent systems that we can further develop.

Mr. McDONELL. Mr. Sharkey, the committee understands that your office was involved in two RFP's, (request for proposals), this last fall which would have provided for a certain number of terminals to the existing Deck and General Data or Data General computers that you've had for 2 or 3 years.

Could you please describe what that program would have involved? And approximately what would have been the cost and was there any cost comparison between it and the new system?

Mr. SHARKEY. Well, the RFP you're talking about was a RFP computer of about 2,500 terminals to expand the present pharmacy system that we have at District 17 at Chicago. To expand it to 21 other districts. We do have the minicomputers to do that and this was the necessary terminal equipment for both the Decks and the Data General and there was a third part of that RFP which was telecommunications here to implement those districts.

The second part, that particular RFP has now been put in suspension pending the continuation of the study, the needs of the decentralization.

As far as costs, I will have to provide that for the record,[1] although we estimated the cost to be about $1.7 million for the necessary 2,800 terminals.

Mr. McDONELL. Was there a comparison made between the two plans as far as costs and capabilities are concerned?

Dr. WARD. Sir, if I might, I'd like to answer that and the answer to that is yes. There are certain VA in-house developed system in pharmacy, for example, the Salt Lake City pharmacy system which is written in MUMPS not in COBOL. Two different computer languages.

In looking at APPLES, or the basic APPLE, super-APPLE, the enhanced pharmacy type system in comparing it to some of the MUMPS developed field system some of the following things came to light.

One of the major items, of course, in a pharmacy system, is to provide security to put access bars across that system so that no unauthorized access to a pharmacy system can be gotten.

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[1] See p. 28.

Both systems—a decentralized developed module and a centralized developed module such as APPLES, offer that kind of security and access bars to prevent abuse of the system.

Second, you need to think about what does a pharmacy do? What are its operations like? Basically, it dispenses prescriptions. And in talking and analyzing pharmacy operations, we found that the average VA pharmacy in your larger hospitals, does about 80 or 99 percent of its business in about 130 or 140 different common drugs which are prescribed.

In looking then, at an enhanced pharmacy system or a centralized computer system, it has the capability of delivery possibly, 8,000 items. A smaller MUMPS field developed system has the capacity of developing about 2,000 items.

You're only prescribing of 90 percent of your business is across 130 or 140 items, why would you want to buy much larger and more expensive and more expensive centralized system.

Generally speaking, the other 10 or 20 percent of the items which a pharmacy dispenses are by and large, not stocked by that pharmacy and they have to be manually ordered from a medical supplier.

So, in either system, then, you would end up with that end of the prescriptions.

The software contract on the enhanced pharmacy system, just to develop the software alone, costs $768,000. That has been received and that software is in the process of being verified in testing.

As opposed to that, the Salt Lake City pharmacy module was developed in-house by a VA employee at the cost of about $9,000. With some verification and documentation of that software, that module can be utilized by all other VA hospitals and expanded to it.

As Dr. Dickie's hospital in Washington now uses a modification of that Salt Lake City MUMPS pharmacy system and they also use further development and modification of it in their research pharmacy.

So, there has been some significant thought given to what is the effectiveness, what is the cost, what are we buying here. What do we really need, I think, for the VA? That seems to be the same key factor in what is needed primarily, by the field people, such as Dr. Dickie in order to conduct the business in the VA medical centers.

And that's the approach that decentralization has taken, is to get to the people who are actually delivering health care and say what is it that you need in the way of computer support and effectiveness to enhance medical care to veterans? And that's what this program is basically designed to do. Is to try and provide effectiveness of care at reasonable cost.

Mr. MONTGOMERY. Mr. Sharkey, you are actually the head of the data management and telecommunications. What is your personal feelings on this reorganization plan?

Mr. SHARKEY. I'm in support of the best way to get the health care out to the veterans. The best way we can do that in the hospitals and most effectively do it, that's the way to do it.

And that's what the project management task team is doing now. In looking at getting the automation, the hospital director and I think, through the years it's been evident, that we've not had auto-

mation in the hospitals to the degree that we should have it and do a bold, decentralization program, we should be able to get it out there in a very timely fashion.

Mr. MONTGOMERY. But are you satisfied with what's moving ahead?

Mr. SHARKEY. Yes, sir.

Mr. MONTGOMERY. You support it?

Mr. SHARKEY. Yes, sir.

I think, right now there are very close relationships being developed and as we proceed down the road, I think we'll have a very unified agency position on it.

Mr. MONTGOMERY. As far as the costs to the Veterans' Administration and the Government, have you got a feel on that?

Mr. SHARKEY. No, sir. I do not at this point in time.

Mr. MONTGOMERY. Mr. Sawyer, I appreciate your coming this morning.

Thank you for coming in. If you have any questions as we move along I certainly will recognize you.

Mr. McDonell?

Mr. MCDONELL. Mr. Hagel, I wonder if you could provide for the record, to the committee, the answer to my last question which is can you provide us with the cost of the envisioned program under your APPLES which went out on an RFP-4 versus the new system with also defining the capabilities of the two where they would match up?

Mr. HAGEL. Well, let me begin by answering that question by saying that we intend to use the enhanced APPLE system that's now in-place in District 17 and continue to try and learn from that system, specifically, in the areas of accuracy, security, and insuring that we don't have problems with fraud or duplicate prescriptions.

There is much good in that system and we want to, before, making any decisions as far as dumping APPLES or doing away with APPLES make sure that we understand all the benefits that have come as a result of that.

Now, as far as the cost analysis between APPLES and the system that Dr. Ward alluded to, for example, in Salt Lake City, we think that the cost-benefit ratio there and analysis will be very favorable in coming down on the side of our decentralized MUMPS system as opposed to the APPLE system.

I don't believe that anyone is saying that the APPLE system is bad. The question really is: What do you need and what do you want and how much can you afford to pay for the system that you're going to put in place? We feel that the APPLE system is too expensive and doesn't give us the flexibility that we need in the other hospitals, in hopefully, the 172 hospitals that we intend to have on line.

But it's important, I think to point out because there has been so much investment of time and resources in that APPLES project—that it is a solid program. But, again, do you need a Cadillac when a Ford or Chevy might do the job just as well in giving us more flexibility in carrying out the needs for the veterans.

Mr. MCDONELL. This committee is interested in service to veterans and we're also interested in cost and I think that we would appreciate seeing something on cost, if we could.

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Mr. HAGEL. We intend very much to have those figures. And I think I mentioned in my prepared remarks and it was mentioned this morning that by September, we intend to present to the Congress, a 3-year ADP program for the VA. Within that plan will be those cost figures.

Mr. MCDONELL. In a comparison?

Mr. HAGEL. Well, there will be a number of cost figures but specifically what you have just touched on.

Mr. MCDONELL. Mr. Sharkey, following on to the chairman's question what do you envision in your role and the role of your office with its almost 2,000 employees in supporting of this new DM&S decentralized computer system?

Mr. SHARKEY. At this point in time, it's under study. There is an ADP task force chaired by Mr. Hagel and Mr. Ward is participating in, of which I am a member. And we are looking today at what the role will be.

I think that's been defined at this point in time but as there is a better understanding of exactly what the total DM&S area is, look at Department benefits, I think it will be some time in the fall before it would really be fully determined as to what the role of what it will be.

Mr. HAGEL. Let me, if I may, pursue that. Because there is so much sophisticated expertise within ODM&T in the area of computers and computer implementation—we intend fully to use that expertise in the area of standard performance, certification performance, capability of systems and continuity of systems.

It will be an expanded role, I think, for ODM&T. It will be a much more expanded role than presently exists for ODM&T. There will be reorientation in that, of course. Once we get to the point where we think we have some solid idea of an overall, both short- and long-term strategy for all the VA, then the ODM&T role will be very, very well defined.

Mr. MCDONELL. In your long-term plans for the total agency, it was mentioned in the U.S. Medicine article recently that you were going to be looking also at DVB? Have you made any determinations there?

Mr. HAGEL. No, we have not.

Mr. MCDONELL. I wonder if we might ask Mr. Ball who is in charge of the data processing center at Hines, Ill., if he might pick up that microphone up there?

We'd like to ask—we have been out and visited your center and we've also noted the research and development efforts that you are making both in the DVB and the DM&S area. Have you at this time received any guidance as to what will be your role in this new scheme.

Mr. BALL. As soon as the Administrator published his executive order, that was a question that I asked him and my people also asked. I called Mr. Sharkey and he, in turn, talked with Deputy Hagel.

My instructions were to continue in the efforts that we were researching, in the development effort. We were currently supporting district 17, the four hospitals with a pharmacy on-line system, working well.

I was told to continue that effort, continue the maintenance of that effort; that is, the further development of it. Also, the expanded pharmacy system which we are working on and which is to go alive later this year at the Hines Hospital, which provides additional support to the pharmacists. In that, it supplies the inpatient with prescriptions through the automated system. It also provides an inventory control for the pharmacies.

So, those two efforts are underway and I've been told to continue and we expect to.

Mr. McDONELL. As I recall, in order to continue your tests of the four hospitals, it required additional terminals. Certainly, not the 2,700 that are in that RFP, but some additional terminals.

Do you have funds for that and are you procuring them?

Mr. BALL. That is underway, I understand at this time, in the Central Office.

Mr. Sharkey may want to address that.

Mr. SHARKEY. Yes, sir. We have two different requests now in process, Mr. Chairman. One is for 10 printers and 10 terminals to do the piloting for the enhanced pharmacy, which also contains admissions to discharge and transfer.

And, there is another RFP for 100 terminals to replace the terminals at district 17 in the four hospitals and also give them about 10 more which they will need for the enhanced pharmacy.

Mr. McDONELL. If I may switch and concentrate on the DVB area for a moment, Mr. Hagel.

The Department of Veterans' Benefits computer system and basically it's called the TARGET system. I'd like to know, you mentioned in your testimony that you're going to look to enhancing the maintenance and the fine tuning of that TARGET system.

Can you just expand on that? Have you actually achieved the basic goals that were planned for that system back before your time, I realize?

Mr. HAGEL. Mr. McDonell, I think John Mattingly would be more appropriate to respond to that than myself. If Mr. Mattingly would come forward.

Mr. MATTINGLY. Mr. McDonell, there are several additional things that need to be done in the TARGET system.

We sometimes speak of enhancement but it's actually—we want to continue to put the chapter 32 processing and the awards processing is in.

But we have additional transaction activities needs to be included.

We also want to get the chapter 31 processing in, which is still running on the old 70-80 type computer. At least, what is called emulation. So, it's running in the 70-80 format—we have several types of transactions that come into the field station. From the field stations with SICOR equipment. All of our fiscal transactions and a few others, and we certainly want to get all those included in. We feel that we can get these into the TARGET system, but we're not through by any means.

Mr. McDONELL. Do I understand that all of these new functions that you're speaking of can be placed in the existing hardware that you've procured here at the start of——

Mr. MATTINGLY. I believe that question needs to be asked of Mr. Sharkey, as to whether the computer has the capacity to handle this. But we certainly expect that it would.

Mr. MCDONELL. Mr. Sharkey, would you care to comment?

Mr. SHARKEY. Well, we're at a posture right now where we've just about used up most of the capacity in the computer system. We know it today. And we have been trying for the last couple of years through the budgetary process to get a couple of more central processing units, put into the system. We are working very closely with the vendor in putting efficiencies into the system.

There are some more things that we can do but it is quite apparent with the number of new additional things that the Department of Veterans Benefits desires that we will have to put some additional computing power into the system.

It could be additional hardware or an upgrade of the present hardware to more faster processing, faster throughput. I think one of the other things that's very important to mention—I've been working very closely with the vendor for the last 4 or 5 months to utilize the computing power that we have at the regional offices to give them office automation capabilities.

To provide that automation capability for the user at—the end user and also to be able to continue the TARGET network, the inputting as we know it today is something that we're pushing very hard on. In addition, to using electronic mail which certainly will also reduce our costs and telephones and getting information around the system much faster.

Mr. MCDONELL. Let me ask the bottom line: When do you expect real time processing within the Department of Veterans Benefits with your TARGET system?

You'd have a target date for that?

Mr. SHARKEY. We do have real time processing. The only thing that is not real time processing today is the updating of the master files out at Hines, and I think this is something that we have to look at, from a cost-benefit point of view. Do we want to update those files online or can we afford to update them in a batched environment over the evening. And I think it's something that you always have to look at.

Is that more important to do that particular piece of work or is it more important to put in some of the more recent legislative requirements that have come down?

Mr. MONTGOMERY. Under the TARGET program, does that come under your jurisdiction?

Mr. SHARKEY. Yes, sir.

Mr. MONTGOMERY. In the regional offices?

Mr. SHARKEY. Yes, sir.

Mr. MONTGOMERY. Tell the committee how many—what the TARGET system is and how many regional offices have the TARGET system and what it does?

Mr. SHARKEY. There are 58 regional offices. There are approximately 3,000 online terminals that look into 3 data processing centers, actually 4 data processing centers.

The Los Angeles Data Center handles the western region. The Hines Data Processing Center—central area. Philadelphia Data

Processing Center handles all of the regional offices on the east coast.

Primarily, if a veteran goes into one of our regional offices, and gives them a name or a serial number or an insurance number, the first thing that a claims examiner does is go to the terminal and makes an inquiry into our beneficiary identification and records locator system which is at Austin, Tex.

There are about 26½ million veterans in that data base. Say, well, what happened to the other 3 or 4 million because we have around 30 million living veterans. It means, that we do not have in the data base, since 1973, every veteran gets into the data base because the DD–2 form 214 comes directly from the military departments upon the discharge of a veteran to our system.

Prior to that time, the only way we got the individual into our system is if he asked for some benefits—be it pension, education insurance, or whatever? The first thing that the claims examiner determines is eligibility. And not only are we, I might add, we're testing three hospitals today, also, the program is starting today to have TARGET terminals in those hospitals to determine eligibility vis-a-vis the Burroughs system at Austin, Tex.

And setting up a claim, the computers at the three data processing centers are what we call holding the working files. While the veteran's information—say, if he's going to school, while we're waiting on the assurance from the school that the veteran is enrolled, the adjudicators do their thing and once it's determined that the veteran is eligible for payment, then this information is forwarded to the Hines Data Processing Center where the permanent files are located and those files then, are updated and checked, as an end result, and I might, we pay out about $43 million a day, out of Hines Data Processing Center in our compensation for pension and education system.

So, when you look at the size of the system we've achieved already, and we've projected about a $250 million cost-benefit saving through the system, the Department of Veterans Benefits has reduced well over 1,400 employees.

And we've already taken those benefits and today I would say it is probably one of the finer online large systems in the world today.

Mr. McDONELL. Do you get better response time to the veteran in adjudicating his claim under the TARGET system than you did in the old IBM system?

Mr. SHARKEY. You're talking about the pilot test.

To the best of my knowledge, we're—you know, 90-some percent, 97 percent of our responses are coming back in less than 5 seconds. And to me, that is a phenomenal turnaround for the type of large system we're talking about.

And I would suspect if you're talking about, if you're getting the check faster than under the pilot test, I really can't answer that. I would hope it's about the same time frame.

Now, before the pilot, we know we're exceeding it by probably weeks and months.

Mr. McDONELL. John, you want to comment?

Mr. MATTINGLY. A comment on the question was on the length of time for adjudication of the claim under the present system TARGET and the old IBM system.

I can't give you any exact increase or decrease in timeframe. There definitely is some—it's getting done faster very much on the fact that we have immediate access to data.

We don't have to—claims folder in all cases. And we can bring up the screen and get some data that we already have on an instantaneous basis.

So, that there is some improvement. What the decrease, I should say, in timespan is, I can't tell you right at the moment.

Mr. HAGEL. Mr. Chairman, why don't we provide those details for the record? We'll go back and get that information and include it.

[The following was submitted for the record:]

The average employment level for Office of Data Management and Telecommunications is estimated to be 2,000 in fiscal year 1982. In fiscal year 1983, this level is estimated to be 1,986—a net decrease of 14. This decrease of 14 is comprised of: Insurance redesign, +14; health care information systems, −15; and general reduction to base, −3.

There are no plans at this time for the average employment for Office of Data Management and Telecommunications (ODM&T) in fiscal year 1983 to be below the 1,986 level. As a result of the agencywide hiring freeze, including ODMD&T, attrition has reduced the staffing level below this 1,986 figure; thus, at this point, ODM&T could be able to add employees to meet the fiscal year 1983 level

Mr. MCDONELL. How many regional offices have the TARGET program and those that don't have the TARGET, what do they have?

Mr. SHARKEY. All 58 regional offices have TARGET terminals located in them which it is centrally managed and designed, programed out of the Hines Data Processing Center.

Mr. MCDONELL. Mr. Chairman, I just have one final question of Mr. Hagel.

The VA budget request that we received up here in January for fiscal year 1983, indicated that the employment in the Office of Data Management and Telecommunications would be decreased by 14 personnel? 14 FTE?

However, we've received telephone calls from anxious employees within the system that that might be a figure that's far smaller than what is actually planned.

Can you provide the committee with information on that?

[The following was submitted for the record:]

Since conversion to TARGET award processing began in early 1979, the system's effectiveness may be measured by comparing the overall processing timeliness of similar claims for the months of December 1978 and April 1982, the latest month for which figures are available. The national average for timeliness of processing initial disablility compensation claims was 115 days for the month of December 1978, and 103 days for April 1982. The national average for initial disability pension claims was 96 days in December 1978, and 74 days in April 1982. On the basis of these figure it would be reasonable to conclude that timeliness of claims processing has significantly improved under the TARGET System.

Mr. HAGEL. First of all, there are no guarantees of anything in this. But I can tell you, I can assure you that we have no intention of dropping that number below 14. Nor do we have any intention of RIFing anyone nor of sending anyone out of the system.

Mr. MONTGOMERY. For the record, Mr. Pickle would like to submit some questions and some comments and without objections that will be done.[1] And we might have several questions that we'd like to submit to our witnesses to answer for the record.

Do any of the committee members have any comments before we adjourn the subcommittee?

I appreciate very much the members being here this morning, as well as our witnesses. There are a number of questions about which I'm concerned, such as not knowing the cost in some areas. I certainly hope that you can provide the answers to the questions that have been asked this morning. The subcommittee now stands adjourned.

[Whereupon, at 9:35 a.m., the subcommittee was adjourned.]

[1] See p. 33.

APPENDIX

PREPARED STATEMENT OF CHARLES T. HAGEL, DEPUTY ADMINISTRATOR, VETERANS' ADMINISTRATION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before your Subcommittee to discuss Automated Data Processing (ADP) plans for the Veterans Administration (VA). With me this morning are Dr. Bill Ward, a management and computer consultant assigned to the VA's ADP Review Task Force; Dr. Ken Dickie, Chairman, Project Management Task Force, Department of Medicine and Surgery; Mr. John Mattingly, Special Assistant for ADP activities, Department of Veterans Benefits; Mr. Jack Sharkey, Assistant Deputy Administrator for Data Management and Telecommunications and Mr. Danny Ball, the Director of the VA Data Processing Center in Hines, Illinois. They are present to respond to any specific inquiries within their respective areas of responsibility.

Specifically, Mr. Chairman, you requested that we focus on the V.A.'s computer plans and the changes brought about as a result of such plans in the Department of Medicine and Surgery, the Office of Date Management and Telecommunications and the Department of Veterans Benefits. As a point of departure, I am furnishing, to be made part of the Subcommittee's hearing record, Administrator Robert P. Nimmo's Executive Order of February 18, 1982 regarding ADP policy in DM&S (Attachment No. 1).

The purpose of the Administrator's and my ADP review initiative is to ensure that the VA is equipped for the future to deliver the best health care and benefits possible to America's veterans. We are the first to recognize that we do not have all the answers. The answers we need will develop partly from what has gone before but more specifically from what we intend to do in the future. It is our intention to help strengthen this Agency in every way, and central to that objective is a credible and workable ADP policy. The Administrator, the VA management team and I all welcome an opportunity to help build a computer system for the VA that is worthy of this Nation's veterans and the dedicated VA employees who serve those veterans.

In October of last year Administrator Nimmo established an ADP Review Task Force to review ADP policy in the VA both for short and long-term planning. He asked me, as the Agency's ADP Executive, to lead this effort. This group quickly determined that application of computer capability within our medical operations, specifically the VA's medical centers, was the highest review priority.

Subsequently, in accordance with the Administrator's Executive Order, a complete and overall review of VA computer operations, policies, and long-term plans was undertaken. The result of this comprehensive review and the accompanying impacts on programs, budgets, and personnel will set the format and tone of our ADP operations' ability to service our Nation's veterans' needs for years to come.

Linked to this reassessment was obviously the organization, programs, and activities of ODM&T. Consideration of problems like the replacement of obsolete hardware, the system-wide establishment of medical ADP systems and the consolidation of diverse functional systems and data bases necessitated direct input from ODM&T.

The ADP Review Task Force was instructed to initiate meetings with Mr. Sharkey and his staff to commence a thorough overview of the organizational and programmatic plans of ODM&T. For this reason, an across-the-board freeze on ODM&T personnel actions will continue until this review is competed. I have also formed an informal advisory committee of select ODM&T personnel to serve in a consulting capacity to the ADP Review Task Force. I submit for the record the names of those individuals expected to participate (Attachment No. 2).

Turning now to the progress to date of our efforts in the medical ADP systems area, I have requested that each Department head designate a highly qualified senior individual to serve as staff to the Project Management Task Force, established by the Executive Order. From the outset it has been our intention to draw upon to the greatest extent possible the innovative and often times ignored accom-

plishments of medical ADP field personnel. However, it has and will continue to be my intention to enlist the assistance of all Agency elements whose expertise is fundamental to the success of this program. As you know, the Administrator's Executive Order has identified a list of verification and development sites which I submit for the record (Attachment No. 3). These "lead" VAMCs are charged with the validation and certification of software, system design, training of personnel and technical support/consultation to the remaining VAMCs. In addition, the Project Management Task Force has identified twelve other VAMCs which will operate as primary decentralization locations for Phase I activities (Attachment No. 4). All of these sites will employ minicomputers presently in our inventory.

Coinciding with the implementation of this first phase of DM&S computer decentralization, just two days from today, March 26, 1982, we are sponsoring one of two special regional conferences on ADP medical applications. The purpose of these meetings is to bring together approximately 30 select VA professionals (medical center directors, physicians, field computer specialists, etc.) to discuss program implementation and utilization of onboard minicomputers at these selected VA medical centers. I will be participating in both these meetings as will the Chief Medical Director, Dr. Donald L. Custis, and Jack Sharkey, as well as members of the ADP Review Task Force who assisted in the preparation of the new DM&S computer policy. In addition, those Congressional committees and federal agencies charged with direct oversight responsibility of this initiative have also been invited to participate (Attachment No. 5). It is hoped that through this open communication that these new medical applications will be able to generate data essential to the formulation of equitable legislative and executive policies regarding our Nation's veterans.

As an important part of the activity in the first phase, we have requested that all of our hospital sites submit to ODM&T through DM&S an inventory analysis of all their existing ADP resources. The underlying purpose of this inventory is to supply the Project Management Task Force with the most accurate assessment of presently available hardware and software which will determine our ability to expand our present hospital capacity without early reprogramming of resources. It is expected, based on preliminary reports from our field stations, that additional ADP resources are available to support increased implementation of decentralization beyond Phase I targets listed in Attachment 4 as primary sites. These candidates will be chosen from among those listed as expansion sites.

We envision the foregoing as the first phase of a three-phase process. The second and third phase will be described in detail in a three year plan to be formally presented to the Congress by September of this calendar year. At this time we can say that the plan will call for completion of the implementation in all the seventy-five major hospitals that perform eighty percent of the acute health care functions in the VA. This second phase will depend upon funding made available in fiscal year 1983. The third phase will complete implementation in all remaining VAMC's and in turn be dependent upon funding available in fiscal year 1984.

It is the intent of our medical ADP systems initiative to extract the maximum benefit from the APPLES system for constructive use in other hospital areas. Therefore, during this initial period, I am directing ODM&T to implement the enhanced pharmacy (APPLES) support system for Medical District No. 17 to bring all four medical centers (Hines, Westside, Lakeside, and North Chicago) onto the enhanced pharmacy system. In order to accomplish this, approximately 100 terminal devices and miscellaneous equipment supported by appropriate personnel will be acquired on the most favorable lease/purchase basis available.

It is expected that ODM&T will prepare a thorough test plan for all inpatient, outpatient and inventory programs that encompass the enhanced "APPLES" system. After appropriate evaluation of this system, I anticipate a final pilot test evaluation report will be submitted by ODM&T to me for purposes not only of verifying the enhanced APPLES system itself but also to provide a basis for comparative evaluation and analysis as our decentralization program progresses.

As a result of this process, ODM&T will have a supportive role in the three functional areas of the decentralization process. First, the Office of Program Planning and Evaluation (PP&E) in conjunction with ODM&T will be charged with conducting thorough and accurate cost-benefit analyses of ongoing ADP programs. Second, ODM&T will be responsible for the immediate operational and general technical assistance support required to implement decentralization. Finally, ODM&T in conjunction with other VA components will be required to demonstrate and develop performance and certification standards which shall be applied system-wide as decentralization progresses.

In sum, Mr. Chairman, there is opportunity for responsible input which ODM&T as well as other VA elements will provide as we proceed to put into place a hospital

automation system which will be capable of ultimately integrating with other aspects of our Agency ADP program.

Turning to your concerns surrounding the Department of Veterans Benefits, for the present, we are continuing to operate our data processing centers along the "centers of expertise" concept which has been discussed in recent testimony before this Subcommittee. This approach maintains systems development, systems maintenance in close proximity to the functional users. This places user and ADP expertise in an interactive environment and engenders cooperation in the systems development area.

The present configuration of responsibilities at the data processing centers allows for a smooth transition to the full implementation of this concept. The Philadelphia Data Processing Center continues to be the center of expertise for the Insurance System, where a redesign of the system is currently underway. The Hines, Illinois Data Processing Center, which has been the focus of development and operations for our Compensation, Pension, and Education System, continues to be so. Debt collection will be the focus of the St. Paul Data Processing Center, and Los Angeles will continue as an operational center associated with the Target System. The Austin Data Processing Center will maintain the VA's financial and administrative systems. As I mentioned earlier, our ADP operations review will consider this philosophy further and establish, in depth, a long-range policy relative to DPC operations.

Turning to the area of benefits delivery, we are continuing with the maintenance of the Target System, implementing changes and improvements as required. The transaction volumes for the period from November 1981 through January 1982 show that the system is now processing close to 5 million transactions per month, and the reliability of the system continues to remain stable. The system's capability to maintain acceptable transaction response times during peak periods of workload continues to be our principal concern. Technical fine tuning of the systems and certain austerity measures have been employed to reduce the impact of peak workloads. In addition, we are researching longer range system alternatives to meet this and other problems anticipated in the growth phases of the system.

In another benefits area, the redesign of the Insurance System continues at Philadelphia, and we plan to have an inquiry capability for that system installed by the end of this year. A firm program to upgrade Centralized Accounts Receivable Systems (CARS) is underway which will meet the debt collection requirements established by recent legislation. We are also involved in preliminary investigations in other areas of DVB operations searching for opportunities to improve efficiency through automation. As an example, we are examining the capabilities of the current mini-computer systems at the Regional Offices to accommodate office-automation functions. Should this particular concept prove feasible, we will be able to increase the productivity of the paperwork functions presently associated with non-automated processing.

In the area of benefits delivery and in all other areas, we will continue with the thorough reassessment and review of ADP programs and operations, consistent with the Administrator's charge of improving ADP management and cost-effectiveness. This review will ultimately develop the long-term ADP strategy that will meet our commitment to support the needs of the agency while remaining consistent with the Administration's objectives of cost containment and efficient management. I would like to emphasize again that this process is a total Agency mission. All elements of the VA are involved and have responsibility for this task. However, while I have continued to stress the VA's combined effort in this project, I feel it appropriate to single out Dr. Don Custis for particular mention. His understanding and leadership have been significant in contributing to the DM&S decentralization ADP policy.

My colleagues and I will be happy to answer any questions you may have. Thank you again for the opportunity to appear here today.

[ATTACHMENT NO. 1]

VETERANS' ADMINISTRATION,
February 18, 1982.

Memorandum to: Chief Medical Director (10).
Subject: Executive Order regarding ADP Policy in DM&S medical operations.

1. Accompanying this memorandum is an Executive Order which specifies a new policy for computers and ADP in DM&S medical operations. As you have responsibility for VA health care programs, I would like you to implement this order and transmit it to the field.

2. Thank you for your help and cooperation.

ROBERT P. NIMMO,
Administrator.

Attachment.

ADMINISTRATOR'S EXECUTIVE ORDER ON COMPUTERS AND ADP POLICY IN THE VETERANS' ADMINISTRATION DEPARTMENT OF MEDICINE AND SURGERY (DM&S)

I. PURPOSE

This order establishes a new policy for use and control of computers and ADP technology by the VA Department of Medicine and Surgery (DM&S). The new policy shall be one of computer decentralization (generically known as distributed data processing) in VA medical center operations.

II. BACKGROUND

One of my first major management directives as Administrator was to set in motion an analysis and re-examination of the agency's overall ADP plans and programs. I designated the Deputy Administrator as the agency's ADP Executive and gave him overall charge and direction of the agency-wide ADP review and reassessment. Concurrent with that re-examination, a "hold order" was placed on all ADP activities. A review team was organized to address the issues and problems concerning ADP and computers. That review team has spent several weeks examining VA ADP activities and has issued its first set of recommendations to me. The team established as its highest review priority the application of computers and ADP to medical operations and VA medical centers. As a result of my appraisal of the work of the ADP review team and its analyses and recommendations, I am directing a new computer and ADP strategy for DM&S which I believe will move the agency forward and provide increased effectiveness in the delivery of medical care to America's veterans.

III. IMPLEMENTATION

This order is intended to provide positive management direction to all organizational elements of the VA associated with the implementation and application of computers and ADP to medical operations. The tasks and assignments which I am directing to be completed are as follows:

1. Department of Medicine and Surgery (DM&S)

I am directing decentralization of computers and ADP policy in VA medical centers in order to provide an on-board computer capability for each medical center to the greatest extent possible. The purpose of this is to give medical center directors maximum opportunity for local initiatives in the increased use of computer and ADP technology.

In this connection, I want to acknowlege the magnificent work in ADP medical applications that many dedicated VA field employees have completed often in the face of serious constraints. These modular subsystems are now available for use in all VAMC's. Therefore, through generic distributed data processing (decentralization), control and ownership of hardware and software will pass to the user (VA medical center). However, I am also directing that ten percent of any medical center's main computer capacity be reserved for management information reporting requirements which will be defined in detail in the near future. In that regard, I am directing the Chief Medical Director (Dr. Donald L. Custis) to overhaul DM&S management information requirements within 90 days with a view toward streamlining management reports. Unneeded, duplicative, and costly reports must be eliminated. Further, I am directing the VA Controller (Conrad R. Hoffman) to overhaul reporting and statistical requirements in the same manner as DM&S. These changes will help the agency in its paperwork reduction efforts. In addition, as Administrator, I will specify in the near future my own set of concise, summary management report items. We may find that the ten percent figure will be too large and, therefore, any excess capacity will be returned to individual medical centers for their own use.

With the advent of decentralization and an on-board computer capability, I expect each medical center director to concentrate on applying computers and ADP technology where they will be most effective. In that regard, it seems appropriate that each VAMC should concentrate on the early installation of patient scheduling, pharmacy, and laboratory systems because those areas appear to have the largest pay-off in the shortest time. Once these systems are installed, then individual

VAMC's may utilize the remaining capacity of their on-board computer capability to address individual management issues and problems.

The Chief Medical Director will have overall responsibility for the implementation of computer decentralization in DM&S. As recommended by the Deputy Administrator as the agency's ADP Executive, I also direct that the CMD establish a small Project Management Task Force on a temporary basis as the VACO organizational vehicle to provide policy and guidance for the implementation of computer decentralization. The Task Force will include Dr. Kenneth J. Dickie of the Washington VAMC as Chairperson, and Arthur Red of my staff along with two or three VA field station employees yet to be named. DM&S will provide office space, support staff, and support funds for travel, etc., for the Task Force.

Once in place, this Project Management Task Force will issue additional instructions to VAMC directors concerning guidance, policy, equipment, etc., regarding computer decentralization. At the same time as management reporting requirements are being revised in DM&S, I want the Chief Medical Director to rethink and reorganize all DM&S organizational elements which bear on ADP in medical operations. Again, such an overhaul should be done with a view toward avoiding duplication, providing cost savings, and reducing personnel requirements.

The following VAMC's are designated as *lead VAMC's* in this new policy of computer decentralization: (a) Albany, N.Y.; (b) Washington, D.C.; (c) Hines, Ill.; (d) Bay Pines, Fla.; (e) Salt Lake City, Utah; and (f) San Francisco, Calif. (medical district).

These lead VAMC's have demonstrated good quality localized computer capacities and I want them to provide help and technical assistance to all other VAMC's in the development and implementation of generic distributed data processing.

In addition, I am designating all six lead VAMC's as Verification and Development Centers (VDC's). These VDC's are directed to conduct: cost comparison studies; evaluation and verification studies; documentation studies; and test implementations of all ADP medical systems (pharmacy, lab, scheduling, etc.). I am directing that this work be completed in less than 180 days and that the results be reported to the DM&S Project Management Task Force. In essence, all systems must be shown to be accurate, reliable, and that they meet the constraints of prudent medical practices. All six lead VAMC's will collaborate on this effort and I am designating VAMC, Washington, D.C., to be the coordinator of this task assignment.

Pending the formal concurrences of OMB and the completion of the appropriations process, I intend to ask for a reprogramming of some funds in fiscal year 1982 to support medical ADP implementation. In addition, it is my intention to ask for some reprogramming of funds and possibly some new monies in fiscal year 1983 and fiscal year 1984 for medical ADP decentralization. The constraints of the budget process being what they are, I am encouraging and approving any individual medical center director's reprogramming of budget dollars from her or his own budget to purchase hardware and software for medical computer decentralization. These local procurements must be made in accordance with federal policies and regulations and be approved by DM&S Project Management Task Force. Included in these local procurements is word processing equipment (office automation). Requirements for word processing equipment are to be reviewed with and approved by the DM&S Project Management Task Force.

One of the continuing problems in DM&S with regard to computers is the need to complete an on-board computer inventory at all VAMC's. Therefore, I am directing that each VAMC director report within 30 days to the DM&S Project Management Task Force an accurate inventory of on-board or available computer hardware and software. Equipment for research, etc., from other than VA sources (HHS Grants, etc.) should also be included in this inventory report. It is not my intention to control or direct this equipment, but to simply allow each hospital to undertake an accurate accounting of possible underutilized computer capacity.

I recommend that each VAMC director establish appropriate contacts with DOD or GSA to locate any excess or surplus computer equipment which the VA might acquire and utilize. VAMC Albany, N.Y., has done an excellent job in this regard and might possibly provide some guidance to other VAMC's.

Finally, I want all VAMC directors to know that by making this technological capacity of the computer available to each VAMC, I am holding them responsible for the cost-effective and timely implementation of this program of computer decentralization. The task at hand is to increase the effectiveness of VA medical care, while at the same time remaining aware of the scarcity of resources and the need to be conscious of the costs of the delivery of veterans' health care programs. I firmly believe that decentralization of computers into VA medical operations will help us overcome these problems and issues.

2. Office of Data Management and Telecommunications (ODM&T)

I am directing that ODM&T have only a limited and peripheral role in the implementation of computer decentralization in medical operations. I want the control and management of this policy of medical computer decentralization to be in the hands of the user (DM&S and VAMC's). There is no doubt that medical computer decentralization will have an unassessed impact on ODM&T operations and its organization. Therefore, it is prudent to continue the freeze on ODM&T personnel actions and to continue to have all ODM&T policies, programs, procurements, reorganizations, etc., reviewed by the Deputy Administrator as the agency's ADP Executive.

There is to be no further development or expansion of the APPLES pharmacy system. APPLES will continue to operate and serve those Chicago area VAMC's which are presently served, while a reassessment of its costs and programs is made. Equipment and other resources intended for the expansion of APPLES will be reprogrammed to support the new policy of medical computer decentralization in DM&S.

ODM&T will receive additional guidance from the Deputy Administrator as the agency's ADP Executive and from the medical computer Project Management Task Force (DM&S) in the near future.

3. Supply and procurement

I am asking the Associate Deputy Administrator for Logistics (William Sullivan) and Assistant Deputy Administrator for Procurement and Supply (Clyde Cook) to provide help and technical assistance as VAMC's address the problems of hardware and software acquisition that medical computer decentralization will bring. After approval by the DM&S Project Management Task Force, each computer or ADP procurement by VAMC's must be processed by supply and procurement in accordance with federal regulations.

4. Inspector General

I am asking the Inspector General (Frank Sato) to provide the technical assistance necessary to meet the security requirements established for ADP systems and applications that are to be established at each VAMC. Oversight in matters regarding the possible wasteful or fraudulent use of ADP facilities remains a general responsibility of DM&S (VACO), and in particular, an IG responsibility.

5. Administration

It is clear that the policy of a decentralized ADP deployment mode will require the revision and updating of established agency procedures. That set of management procedures (MP II, et al) and all interim issue directives that presently define management responsibilities and procedural directives concerning program formulation, acquisition, and management will require immediate review and rewriting to accommodate the management needs associated with decentralized medical ADP system operations. I am directing that Mr. Greg McGowan, Executive Assistant to the Deputy Administrator, undertake the supervision of this assignment and complete it within 120 days. Such agency resources or personnel that are required for this task will be assigned to Mr. McGowan on a temporary basis.

In essence, this work will require consultations and interactions with all departments involved in the ADP program process. This activity will be conducted under the overall direction of the Deputy Administrator as the agency's ADP Executive, who will represent the final authority on all matters involving the exercise of responsibility and decision-making for ADP matters.

All pertinent agency documents, policies, procedures, etc., associated with ADP programs, policies and operations are *frozen* in place pending evaluation and reassessment by Mr. McGowan's work group.

IV. ACCOUNTABILITY

I want to remind all VAMC directors of my continuing concern regarding any possibility of fraudulent or wasteful use of ADP facilities and systems. The formalization of this concern is implicit in the responsibility associated with the local management of ADP systems at each VAMC. I intend to hold each director accountable if frauds are perpetrated in any area of medical operations within their purview.

V. SUMMARY

This new policy of computer decentralization in medical operations is a serious and very challenging assignment for everyone concerned. It will set the tone for

years to come and will have both immediate and long-term impacts on the medical care of America's veterans. I know that adding this valuable "tool" to each VA medical center will give that VAMC increased effectiveness in carrying out its mission. Therefore, let us continue to work together in delivering effective and efficient health care to our nation's veterans.

This order is effective February 18, 1982.

ROBERT P. NIMMO,
Administrator.

[ATTACHMENT No. 2]

The individuals invited to join the informal advisory committee are: (1) Committee chairman, Danny Ball, Hines DPC Director (present at this hearing); (2) David Van Hooser of ODM&T, VACO; (3) Earl Cearley, Chief of Operations at Austin; (4) John Macurio, Assistant Director, Philadelphia; (5) Eldridge Huntington, Chief of Systems Division, Los Angeles; (6) Tom Ransom, Director, St. Paul; (7) Bob Lynn, Assistant Director, Austin; and (8) Tom Jacobs, Systems Development Chief, Hines.

[ATTACHMENT No. 3]

The following VAMC's are designated as lead VAMC's for the decentralized Health Care Automation System program: (1) Albany, New York; (2) Washington, D.C.; (3) Hines, Illinois; (4) Bay Pines, Florida; (5) Salt Lake City, Utah; and (6) San Francisco, California (Medical District).

[ATTACHMENT No. 4]

LEAD AND PRIMARY DECENTRALIZATION HOSPITAL SITES

Lead VAMC's: Albany, New York; Washington, D.C.; Bay Pines, Florida; Hines, Illinois;[1] Salt Lake City, Utah; and San Francisco, California.

Brooklyn, New York; Manhattan, New York; Fort Howard, Maryland; Perry Point, Maryland; Pittsburgh, Pennsylvania; Birmingham, Alabama; Lexington, Kentucky; Oklahoma City, Oklahoma; Martinez, California; Palo Alto, California; Tucson, Arizona; Livermore, California; and Loma Linda, California.

EXPANSION HOSPITALS

Buffalo, New York; Boston, Massachusetts; Syracuse, New York; White River Junction, Vermont; West Haven, Connecticut; Wilmington, Delaware; Richmond, Virginia; East Orange, New Jersey; Altoona, Pennsylvania; Mountain Home, Tennessee; Biloxi, Mississippi; Columbia, South Carolina; Miami, Florida; Augusta, Georgia; and Decatur, Georgia.

Cleveland, Ohio; Ann Arbor, Michigan; St. Louis, Missouri; Columbia, Missouri; Indianapolis, Indiana; Madison, Wisconsin; Omaha, Nebraska; San Antonio, Texas; Denver, Colorado; Dallas, Texas; Sioux Falls, South Dakota; Kansas City, Missouri; Houston, Texas; Portland, Oregon; Seattle, Washington; Wadsworth, California; Long Beach, California; Fresno, California; and Reno, Nevada.

[ATTACHMENT No. 5]

CONGRESSIONAL COMMITTEES AND FEDERAL AGENCIES

Honorable Edward Boland, Chairman, HUD-Independent Agencies Subcommittee, House Appropriations Committee.

Honorable Jack Brooks, Chairman, House Committee on Government Operations.

Mr. Frank Carr, Commissioner, Automated Data and Telecommunications Systems, General Services Administration.

Honorable Alan Cranston, Senate Veterans Affairs Committee.

Honorable Vic Fazio, Chairman, Subcommittee on Legislative Branch Appropriations, House Appropriations Committee.

Honorable Edwin (Jake) Garn, Chairman, HUD-Independent Agencies Subcommittee, Senate Appropriations Committee.

Honorable John Paul Hammerschmidt, House Veterans Affairs Committee.

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[1] Represents the APPLES effort.

Honorable Frank Horton, Committee on Government Operations, House Committee on Government Operations.

Mr. John Merck, Chief, Veterans Affairs Branch, Office of Management and Budget.

Honorable G. V. (Sonny) Montgomery, Chairman, House Veterans Affairs Committee.

Honorable Alan K. Simpson, Chairman, Senate Veterans Affairs Committee.

Mr. James Williams, GAO Evaluator, General Accounting Office.

DEPUTY ADMINISTRATOR OF VETERANS AFFAIRS,
Washington, D.C., May 11, 1982.

Hon. G. V. (SONNY) MONTGOMERY,
Chairman, Committee on Veterans' Affairs,
House of Representatives, Washington, D.C.

DEAR SONNY: Your letter to me dated April 5, 1982, requests clarification on the question of comparative systems costs in VA medical ADP systems that was discussed during the hearing on March 24 by your Subcommittee on Oversight and Investigations. Specifically, you requested a copy of the cost and capabilities comparison that was cited by Dr. Bill Ward on page 4 of the transcript.

At the time of the hearing, the medical systems program under discussion was in a formative stage of organization. Since those cost analyses, cost benefit and comparison studies normally associated with a formal program plan were either only in an early stage of formulation or under evaluation, we were not yet in a position to present comprehensive cost data of sufficient substance to merit review by your Committee. Since that time we have decided to continue the medical ADP systems consulting contract with Deloitte, Haskins and Sells established earlier this year. This contract will provide a basis for on-going evaluation and selection of medical ADP operating systems and hardware by establishing a comparative test methodology and defining cost benefit and systems effectiveness criteria. The work anticipated from Deloitte, Haskins and Sells will be supplemented and carried forward for future systems needs by the VA's Office of Program Planning and Evaluation (PP&E).

As has been stated on this and other occasions, we intend to present this information in our detailed Program Plan in September 1982. In this connection, I can cite the responses shown in testimony as follows: p. 12 & ff, (Mr. Hagel); p. 28, (Mr. Sharkey); p. 28 & ff, (Mr. Hagel); p. 30, (Mr. Hagel).

In the foregoing context Dr. Ward's response was premature in that there does not yet exist a thorough systematic study comparing the costs of the two automated pharmacy systems under consideration by the VA. There does exist however, a body of information and data that, pending rigid definition and analysis, argues convincingly that given the same functional requirement, certain user oriented languages, including MUMPS, can lead to significantly lower programming costs and skill level requirements. Indeed, this rationale supports the widespread, interest in Basic, PL-1, MUMPS and similar languages that is evident in computer activities today. Dr. Ward was attempting to respond in this context.

I appreciate your support and guidance in our efforts to develop a new ADP policy for the Department of Medicine and Surgery (DM&S).

Regards,

CHARLES T. HAGEL,
Deputy Administrator.

STATEMENT OF U.S. REPRESENTATIVE J. J. "JAKE" PICKLE (D-TEXAS) BEFORE THE COMMITTEE ON VETERANS' AFFAIRS

Mr. Chairman, I appreciate this opportunity to submit further testimony to this Committee regarding the Centralized Development Center project at the Veterans' Administration Data Processing Center in Austin, Texas.

You will recall, Mr. Chairman, that after months of study and based on General Accounting Office recommendations, the Veterans' Adminstration last year agreed to put into operation the Centralized Development Center in order to more efficiently coordinate computer programming and related operations for the Veterans' Administration. The program, Mr. Chairman, was abruptly cancelled by the new Administration on partisan political grounds, and in its place a new program called "centers of expertise" was installed. This decision, Mr. Chairman, as you will recall, was made without any study or any supportive documentation.

When I addressed this Committee last October, I was seriously concerned that the decisions being made by the new Administrator would diminish the quality of service provided our veterans and would result in the loss of jobs or reduction of grades of employees at the Austin Data Processing Center. The newly created CDC in Austin had just been abolished without justification. When I expressed to this Committee my concerns about the approach the new Administration was taking, the VA in response to my concerns made certain commitments:

The quality of service provided our veterans would not be adversely affected by the changes being made by this Administration.

The talented ADP staff in Austin would be provided meaningful work.

The jobs and grades of these employees would be protected.

I have had contact with several of the Austin DPC employees during the past several months. They inform me that they have been productively employed, although those trained in the area of automated medical systems have not been given the opportunity to develop new systems that could improve services at the VA hospitals. They also informed me that the VA is now completely decentralizing the development of medical systems and these employees fear that they will be fired or transferred elsewhere in the country. The Center is now operating under a hiring and promotion freeze which even prevents developmental promotions. These employees are very apprehensive about their future. Moreover, I'm advised that the new decentralized medical system could be a multi-million dollar cost to the VA system. Is this correct?

In my discussions with these employees, I reminded them of the commitment that this Administration made to them and to me last October. I ask now, "Does this Administration intend to honor this commitment? Will these employees continue to be given an opportunity to perform meaningful work in their area of expertise? Will they be afforded an opportunity to advance their careers?"

Mr. Chairman, with your permission, I would like to read the following questions into the record and request that the Administrator of the Veterans' Administration provide a written response to each:

What is the status of the "centers of expertise" concept?

What will be Austin's role under this concept?

Under the decentralized approach for ADP medical applications, what systems will the trained staff in Austin participate in designing?

Under the decentralized approach, what does the VA plan for the nationwide medical applications that presently are processed in Austin?

Does the VA intend to honor its previous commitment that the jobs and grades of the Austin DPC staff will not be adversely affected by the many changes now occuring within the VA ADP community?

When will the hiring and promotion freeze be lifted in order that these employees may pursue meaningful careers?

Mr. Chairman, I appreciate the consideration given me by this Committee and I look forward to receiving a reply from the Veterans' Administration regarding the concerns I have outlined. I urge the re-establishment of the CDC system which was agreed to—and which was cancelled for political reasons.

COMMITTEE QUESTIONS SUBMITTED BY CHAIRMAN MONTGOMERY TO VA DEPUTY ADMINISTRATOR CHARLES T. HAGEL

1. Six VA Medical Centers have been designated as lead VA Medical Centers in the new policy of computer decentralization to provide technical assistance to all other VA Medical Centers in the development and implementation of generic distributed data processing. What sort of organization do you have in mind for this activity? For instance, will each lead VA Medical Center be assigned a region and be responsible for all VA Medical Center's computer decentralization in that region? Please provide us some more detailed information on this.

The lead VAMC's (now called Verification and Development Centers (VDC)) were selected upon the basis of two considerations: central locations within established VA Medical Regions; and the experience that each had gained in medical ADP systems activities prior to this time. The VDC's are anticipated to provide services for this program as follows:

Consultation and assistance in planning and installing medical ADP systems to other less experienced VAMC's within the region; continuing technical development, evaluation, test and verification capabilities to aid in the establishment of a suitable body of certified software for use in the hospital systems; tests and demon-

strations to establish cost-effective and efficiency measurements to aid in the selection of software from sources within and without the VAMC system.

Initially (over the first two years) the emphasis in this activity will be placed on the consultation role. It is anticipated that systems needs and growth requirements as seen through early experience in the program will dictate the future structure and mission of the VDC's. It is not yet certain, for instance, that the VDC's will number 6 on a permanent basis. Staffing of 4 to 6 FTEE is anticipated for each VDC site.

2. With the Executive Order requiring decentralization of computer systems, do you anticipate that the VA will now be in a position to purchase software applications off-the-shelf?

It is a prime objective of the present plan to allow the Hospital Director, with his view of his management needs, to select software programs from three sources: those developed by his own services; those available from other hospitals; and those seen to be available from commercial sources. The VDC operations previously described will perform those tests that will certify programs prior to release for consideration, and selection will be based upon cost benefit and maximum value criteria prepared for this purpose. Where procurement action is required, applicable GSA regulations will govern acquisition procedures.

3. The six lead VA medical centers will also be designated as Verification and Development Centers (VDC's). As such, they have been directed to conduct cost comparison studies, evaluation and verification studies, documentation studies, and test implementations of ADP medical systems. Have these studies been initiated? If so, please provide for the record any preliminary findings, and how much the studies will cost the VA.

The VA presently owns two groups of medical care software. The first is that developed under the APPLES Program, covering enhanced pharmacy and certain admission, discharge and transfer functions (ADT) which are in the final stages of certification and implementation in Medical District No. 17. Total costs through production implementation in four hospitals for the final segment of this program is estimated at $1.2M (including hardware). The second group of available software is made up of a large number of candidate programs developed within the hospitals themselves, commonly called the MUMPS programs. Arrangements are in progress to evaluate and certify these on the basis of need and suitability within the VDC structure. Costs are an essential consideration in this process. These costs will be presented in the detailed program plan to be made available in September 1982.

4. The Executive Order directs that each VA Medical Center Director report within 30 days to the Department of Medicine and Surgery (DM&S) Project Management Task Force an accurate inventory of onboard or available computer hardware and software. Has this been completed? If so, was any underutilized computer capacity been discovered?

The individual hospital responses to the request for inventory data were received on schedule. The data provided is presently being compiled in a computer program at the VACO. The results of this inventory are scheduled to be available on April 18, 1982.

5. The February 15th edition of U.S. Medicine indicates that you are considering reprogramming fiscal year 1982 appropriations to purchase another 45 to 50 minicomputers and microcomputers. Will the funding for these purchases come from the health care budget? If not, where do you expect to find the money from the 1982 appropriations? Do you anticipate seeking supplemental appropriations?

A review of the reference does not substantiate the interpretation given. However, more the point, there is a need for acquisition of some number of computer terminals for use in the early Phase I installations presently being planned. This number falls well within that number foreseen originally for APPLES in fiscal year 1982. The Agency is aware that fiscal year 1982 funds are not presently available for use in the Health Care Automation System (HCAS) program, a condition that will remain until suitable program plans have been submitted and approved by the proper agencies. The option to ask for a re-programming of funds in fiscal year 1982 will be dependent upon our progress at that particular juncture.

6. The U.S. Medicine article states that your recommendations to the Administrator for decentralized medical computer support were based on concerns expressed by the National Association of VA Physicians, as well as visits to 15 Medical Centers and conversations with Chiefs of Staff from 25 others. Could you elaborate on what these individuals told you?

It is of course difficult to summarize the content of many contacts experienced by even a small number of individuals. It may serve a purpose however to summarize

those considerations that became the basis for conclusions by the ADP Review Group:

(a) Physicians and managers alike cited the lack of any level of ADP support for their health care operations as their principal administrative/clinical need.

(b) Managers, without exception in our experience, stated that strong belief that ADP offered the most immediate answer to the problem of increasing mission requirements coupled with decreasing ceilings on funds and personnel.

(c) Medical professionals took issue with the continued VACO commitment to a program formulation process that to date had yielded little more than a promise of further delay.

(d) Medical professionals criticized the VACO preoccupation with a systems approach that not only has failed to be updated to match the progress made in medical ADP technology during the last five years, but additionally offered no opportunity for relevant growth or user involvement.

(e) Administrators and medical professionals demonstrated in many forms the readiness of their organizations and staffs to manage ADP systems and to integrate this capability effectively into their health care operations.

7. Please explain why the VA chose the MUMPS Pharmacy Sytem as the core for its computer support in VA Medical Centers as opposed to APPLES? For example, is MUMPS more reliable, cheaper to operate, etc.?

Precisely stated, the VA has chosen to raise the body of MUMPS programming that has been developed within the VAMC system in response to local interests and needs, to the point where it can be evaluated, certified and presented for consideration by the individual VAMC's. The MUMPS software will, in effect, compete with other VA-owned software (APPLES) and with available commercial packages as described earlier. The HCAS program will feature the establishment of a comparative evaluation process that will, in the future, assist in choosing precisely suitable software configurations within each VAMC. Programs in different languages bring different emphasis to those criteria normally used in software selection, even when these programs are designed to produce the same functional outputs. MUMPS equipped ADP systems will generally match other systems in hardware costs and can be designed to be as reliable and secure as those in any language. MUMPS, as with other higher order free text languages, offers flexibility, ease of training ("operator friendly") and ease in customizing and growth, all features seen to be desirable for health care applications.

COMMITTEE QUESTIONS SUBMITTED BY HON. DAN MICA TO VA DEPUTY ADMINISTRATOR CHARLES T. HAGEL

1. Has there been a study to justify that a decentralized approach is more cost beneficial than APPLES approach?

A study under the terms indicated has not been conducted. Confusion continues to exist in the matter of APPLES as an operational pharmacy software program and the use of the term APPLES to describe a rigidly standardized, centrally controlled ADP system whose principal hardware components were originally anticipated to be deployed on a medical district basis. The HCAS program carries the hardware deployment a step further, placing the main elements under the management control of the Hospital Director. Functionally, the HCAS pharmacy element will duplicate the APPLES elements. The computer installed in each hospital will perform the pharmacy function in addition to many other health care functions. A study is presently planned to determine if the advantages gained in enlarged health care delivery capability will offset the additional computer cost on a cost benefit/maximim value basis.

2. Has anyone compared the MUMPS system to APPLES for the pharmacy application?

Existing MUMPS pharmacy systems are presently under review. Once raised to a level of functional comparability, a test (APPLES in Chicago, MUMPS in perhaps San Francisco) will be executed to determine the relative efficiency with which each system supports those cost/benefit objectives that have been established.

3. Which system does the pharmacist desire?

The APPLES enhanced pharmacy functional users statement is presently under final review by the user groups (pharmacy and administration) in Medical District No. 17 and the Director of Pharmacy Service at VACO. This review process will be carried on as a standard procedure for all candidate pharmacy programs. The pharmacist "user" is representative of a number of functional operators ranging from clerical through professionals, like pharmacists, medical doctors and managers. All

pharmacists seem to agree easily on the program elements that involve automation of the prescription and drug issuing process; thereafter all pursue various measures that will tailor the ADP system to their particular operation, inventory processes, patient data, etc. The development of flexible programming to permit this customizing in a safe and efficient manner is an important program goal.

4. Can MUMPS provide drug control, patient profile and on-line hospital-to-hospital communication?

MUMPS programming can duplicate any function provided by other pharmacy programs, including communications or "networking." The networking feature, a significant cost feature, promises certain cost benefits. An evaluation to establish the cost/benefit relationship between systems using various degrees of networking is a feature of the early phases of the HCAS program.

5. If MUMPS were to be procured, are there sufficient technical resources at each hospital to efficiently use the MUMPS computer?

The HCAS program as presently conceived is based upon the anticipation of orderly growth in ADP capability among all elements of the system requirements. In effect, the establishment of hardware systems will be paced by other program considerations: software development, budget, documentation, training, available support personnel, etc. Under this concept, the investment of non-recurring funds for hardware will be, in general, closely aligned with the user's ability to put the hardware to constructive use. MUMPS programming does not place additional burdens upon technical resources above those associated with other languages.

6. What equipment must be procured for MUMPS?

MUMPS programming, as is typical of other members of the modern family of higher order languages, does not call specifically for any special equipment. It is the choice of a particular system design concept that determines the equipment components which must be acquired. The HCAS program in its early phases will rely upon minicomputers, CRT terminals, and printers which can be procured readily from present dealer catalogs, and applied at little risk. Later program requirements, such as networking, will add the need for the concentrators and modems which are commonly encountered in these applications.

7. How long will this procurement take?

Present planning calls for procurement of the principal hardware inventory for this program to occur in a 30-month period. During this period, implementation will occur in phases, with those VAMC's whose health care activities are greatest in scope receiving priority attention.

8. What price advantages are gained by cancelling the APPLES terminal procurement for multiple MUMPS procurements? Precludes bulk discounts, uniformity of training and documentation.

In the area of terminal procurement for HCAS specifically there is an immediate cost advantage in the CRT terminals area. This advantage however, is not due to the MUMPS programming that will be involved, but rather to the absence of need for networking (hence modems, concentrators, ect.) in the early program phases. As the requirement for networking may emerge in the future, these costs will return. Thus, as a general statement, the terminal costs of this program appear to be relatively independent of the system software concept.

9. How can decentralization prevent procurement of different equipment, redundancy in software development and in general a chaotic nationwide system?

Decentralization has placed the responsibility for the management of computer assets squarely on the shoulders of the hospital director. This responsibility includes compliance with the equipment and performance standards, regulations regarding budgeting, procurement and inventory, and those program regulations concerning the selection and application of software made available by the verification process under the control of the VDC's. In these respects the hospital director is directly accountable to the Chief Medical Director. The HCAS program, involving as it does a large number of installations, is being integrated into the established VA hospital management structure through which all aspects of VAMC budgeting, planning, operations and accountability are managed.

10. Since the Data General and Digital Equipment computers were specifically justified through GSA for pharmacy, would the use of this equipment for other purposes violate this justification?

The equipment cited was, specifically, justified for the APPLES pharmacy system. In keeping with our program plans, certain of these computers will be used precisely as originally intended. The remaining units are targeted for use in systems that include the hospital pharmacy function, but which will likely employ programming in non-APPLES software. Use of this equipment in this manner will call for new justification under an HCAS program plan. The process of preparing the program

instruments and plans to conform to the normal approval procedures is presently underway.

11. Is it not true that many years of evaluation research and dollars have been expended in determining the APPLES system is cost effective and viable to the pharmacist?

This statement is true to the extent that the studies compared APPLES to current manual systems, or, to a limited extent, the APPLES to some early, and outdated, automated pharmacy system. APPLES has been shown to be a competent solution to a narrow range of functional health care problems. The system currently has advantages over other systems, mainly due to its advanced stage of development. APPLES will play a role in HCAS. However, there are other equally capable software systems owned by the VA, which are based upon more advanced software technology and which demonstrate attractive qualities of flexibility, ease of support and operator use, as well as a promising outlook for growth with user participation. These types of systems warrant the interest and support of the VA in the HCAS program.

12. Is it also true that the APPLES procurement, if reinstated, would culminate in an award within 90 days and deliveries shortly thereafter?

The evaluation process for the APPLES terminal RFP is within 90 days of completion. Thus deliveries could be achieved in the time scale proposed. Use of deliverability as a comparability criteria however, will be quite misleading. The CRT terminals foreseen for HCAS are less complex than APPLES terminals, and can be immediately procured off the shelf from a number of suppliers (quantity considerations aside).

QUESTIONS SUBMITTED BY HON. J. J. "JAKE" PICKLE TO VA DEPUTY ADMINISTRATOR CHARLES T. HAGEL

1. What is the status of the "centers of expertise" concept?

The phrase "centers of expertise" has emerged as a descriptive name for an approach to Data Processing Center (DPC) management wherein the interaction between the user and the Automated Data Processing (ADP) system programmer and operator is used to advantage for the efficient conduct of the ADP system maintenance and enhancement process. In effect, the computer system manager's knowledge and experience with the users requirement and history, coupled with his knowledge of the existing computer system and the condition of its software, constitute a resource which can be used to advantage in ongoing operations. The conditions which support this concept continue to operate.

2. What will be Austin's role under this concept?

Austin DPC is growing as the center whose primary mission involves the administrative and financial data processing needs for the Agency. An examination of the entire Agency processing needs for the decade of the eighties is underway to insure that these needs and anticipated resources remain efficiently aligned. It is early to describe in detail what changes might be necessary; however, a change in mission for the Austin facility is not anticipated.

3. Under the decentralized approach for ADP medical applications, what systems will the trained staff in Austin participate in designing?

There remains in Austin a small number of staff members who received some training in the use of minicomputers (then, as now, the principal interest for medical applications). These staff members have since been reassigned constructively to tasks involved in financial and administrative areas, which also incorporate the use of minicomputers. Training in minicomputer operations will become an increasingly useful accomplishment as this class of ADP equipment grows toward a more prominent position in the ADP field. The establishment of the decentralized health care automation system in the VA hospital system will place great demands upon all of our ADP resources. The alignment of these resources precisely with our needs remains as a challenging management requirement.

4. Under the decentralized approach, what does the VA plan for the nationwide medical applications that presently are processed in Austin?

Certain major medical ADP requirements have grown in the Austin environment over the past years, to the point that the considerations discussed previously under "centers of expertise" apply. These programs which include portions of the Automated Management Information System (AMIS) and the Patient Treatment File (PTF), while presently under review, constitute the basic medical management information data bases for this Agency. These requirements may change in the dis-

tant future; however, there are no immediate alternatives to the Austin operation under consideration.

5. Does the VA intend to honor its previous commitment that the jobs and grades of the Austin DPC staff will not be adversely affected by the many changes now occurring within the VA ADP community?

Evaluation and case-by-case changes involving job and grade classification continue as a management and personnel function in accordance with established Federal management practice. Changes (both up and down) have occurred recently in Austin as part of this process. These changes were not related to the discontinuance of the CDC concept at the Austin DPC. Management of personnel resources to maintain alignment with Agency needs will continue into the future at the Austin DPC, as well as at all other VA field stations.

6. When will the hiring and promotion freeze be lifted in order that these employees may pursue meaningful careers?

The present hiring and promotion freeze is necessary to minimize the need for ADP personnel decisions and changes until the Agency can establish a comprehensive, overall ADP strategy and policy. Is is not yet apparent when the freeze will actually be lifted; however, it is our intention to complete the Agency 3-Year Plan by September 1982. In that context, we anticipate an end to the freeze some time before that date.

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